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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,370	12/09/2003	Sergei V. Govorkov	LMPY-19010	4429

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EXAMINER
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RODRIGUEZ, ARMANDO

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/731,370

Applicant(s)

GOVORKOV, SERGEI V.

Examiner

ARMANDO RODRIGUEZ

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-26 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-30-2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 15 is objected to because of the following informalities: the limitation "the dispersive element" should read as "the dispersion grating" as introduced in line 22 of the claim. The examiner will interpret the limitation as referring to "a dispersion grating". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 15-18, 20-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleinschmidt et al (US 6,516,012).

Regarding claims 1, 2, 20, 22, 26,

Figure 7 illustrates a gas laser having a gas reservoir (202) [applicant's chamber], a pair of electrodes (246), (248) [applicant's electrodes], a pair of windows [applicant's window], an optics module (210) [applicant's line narrowing module], which includes a grating (213) [applicant's dispersive element].

Regarding claim 3,

Figure 7 illustrates the grating (203) defining a resonator.

Regarding claims 4, 16,

Figure 7 illustrates the optic module as including a prism (211).

Regarding claims 5, 21,

Figure 7 illustrates a slit (215).

Regarding claims 6, 7, 17, 18, 23,

Figure 7 illustrates an optics module (212), which includes interferometer (60), for providing reflection of the beam into the chamber [applicant's redirecting optics], column 11 lines 48-55 and providing outcoupling of the beam [applicant's decouple].

Regarding claims 8, 24, 25,

The beam is steered by beam splitter (62) into the photodiode (66) before being re-directed into the chamber.

Regarding claim 15,

Figure 7 illustrates a gas laser having a gas reservoir (202) [applicant's chamber], a pair of electrodes (246), (248) [applicant's electrodes], a pair of windows [applicant's window], an optics module (210) [applicant's line narrowing module], which includes a grating (213) [applicant's dispersive element] and a slit (215).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9-11, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleinschmidt et al (US 6,516,012) in view of Volger (US 6,577,663).

Regarding claims 1, 9-11, 14, 19,

Kleinschmidt et al illustrates a gas laser having a gas reservoir (202) [applicant's chamber], a pair of electrodes (246), (248) [applicant's electrodes], a pair of windows [applicant's window], an optics module (210) [applicant's line narrowing module], which includes a grating (213) [applicant's dispersive element] and a slit (215).

Kleinschmidt et al is silent as to having a second discharge chamber, an electronic synchronization system, an optical isolation module and at least one etalon.

Volger illustrates in figure 3 a gas laser including a first and a second discharge chambers (1) and (14), a synchronization system (7), an optical isolation module (3) and an etalon included in line narrowing module (12).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to combine the second discharge chamber of Volger with the gas laser of Kleinschmidt because it will increase the power beam output, column 18 lines 33-35 of Volger.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kleinschmidt et al (US 6,516,012) as applied to claim 1 and further in view of Kleinschmidt et al (US 6,801,561).

Kleinschmidt et al (US 6,516,012) is silent as to having a cylindrical lens.

However, the use of cylindrical lenses in gas lasers for wave front correction is well known as disclosed by Kleinschmidt et al (US 6,801,561) in the abstract and illustrated in figure 3A.

***Allowable Subject Matter***

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

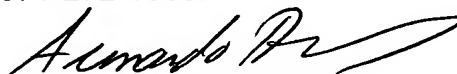
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARMANDO RODRIGUEZ whose telephone number is 571-272-1952. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ARMANDO RODRIGUEZ  
Primary Examiner  
Art Unit 2828

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